Attorney Docket No. 56162.000338 Application No. 10/050,128

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of	:)		
Michael J. GRAZIANO, et	t al.	Group Art Unit: 2661	MEGA
Application No.: 10/050,1	28)	Examiner: Unknown	
Filed: January 18, 2002)		1 9 2002
For: METHOD AND SY	STEM FOR VARYING	G AN ECHO	

INFORMATION DISCLOSURE STATEMENT

CANCELLER FILTER LENGTH BASED ON DATA RATE

MAY 3 1 2002

The Director of the United States Patents and Commissioner for Patents Washington, D.C. 20231

Technology Center 2600

Sir:

In accordance with 37 C.F.R. §§ 1.56, 1.97, and 1.98, Applicants respectfully submit the following documents for the Examiner's consideration. A copy of Form PTO-1449 and copies of each of the listed documents are enclosed for the Examiner's convenience.

Applicants respectfully request that the Examiner considers the enclosed references and that the Examiner indicates that the references have been considered in this application by returning a copy of the Form PTO-1449 with the Examiner's initials in the left column per MPEP 609.

This Information Disclosure Statement is believed to be submitted before the mailing of a first Office Action. Accordingly, no fees are due. However, if any fees are

incurred upon the filing of this Information Disclosure Statement, the Commissioner is hereby authorized to charge the undersigned's Deposit Account No. 50-0206.

Respectfully submitted, HUNTON & WILLIAMS

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INFORMATION DISCLOSURE STATEMENT BY APPLICATE

	Complete if Knowechnology Cente		
Application Number	10/050,128		
Filing Date	January 18, 2002		
First Named Inventor	Michael J. GRAZIANO, et al.		
Group Art Unit	2661		
Examiner Name	Unassigned		
Attorney Docket Number	56162,000338		

-				U.S. PATENT DOCU	MENTS		
		U.S. Patent Document		Name of Patentee or Applicant	Date of Publication of	Pages Columns Lines Where Poles	
Examiner Initials *	Cite No. ¹	Number	Kind Code ² (if known)	of Cited Document	Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
	U1	5,363,321		Dao Trong et al.	11/08/94		
	U2	5,524,089		Takano	06/04/96		
	U3	5,570,310	_	Smith	10/29/96		
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	U8	5,909,384		Tal et al.	06/01/99		
	U9	5,940,312		Hansen	08/17/99		
	U10	5,941,939		Pan et al.	08/24/99		
	U11						
	U12						
			NON	PATENT LITERATURE	DOCUMENTS		
·	Т-	1	NON	FAIEN LILENATORE	DOCUMENTS		
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. Haykin, Simon, Communication Systems 4 th Edition, Wiley, 2001, page 436				e, page(s), volume-issue	T²
	P1						
	P2	Brigham, E. Oran, <i>The Fast Fourier Transform and its Applications</i> , Prentice Hall, 1988, pgs 191-193					
	P3	Embree, Paul M. and Kimbel, Bruce, C Language Algorithms for Digital Signal Processing, Prentice Hall, 1991, pgs 255-256 and 266 and 267					
	P4		Haykin, Simon, <i>Adaptive Filter Theory 3rd Edition</i> , Prentice Hall, 1996, pgs 393-404				
	P5	Proa	Proakis, John G., Manolakis, Dimitris G., "Digital Signal Processing: Principals, Algorithms and Applications 3 rd Edition, Prentice Hall, 1996, pgs 23-28				
	P6	ITU Sta	ITU Standard G.991.2, "Single Pair High Speed Digital Subscriber Line (SHDSL) Transceivers", April 2001, pgs 1-191, Irvine, California				
	P7	P7 ITU Standard G.994.1, "Handshake Procedures for Digital Subscriber Line (DSL) Transceivers", June 1999, pgs 1-46, Geneva					
	P8	ANSI Star	ANSI Standard HDSL2, "High Bit Rate Digital Subscriber Line2 nd Generation (HDSL2)", February 21-25, 2000, pgs 1-94, Maui, HI				

Examiner	Date	
Signature	Considered	

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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.